

(e) *General*

Without many more breeding experiments no further genetic analysis can be made of these results. The patterns of inheritance shown in the morphological characters of the doves are well known in the inheritance of characters in other organisms. There is no correlation between the pattern of inheritance shown by one character in a particular cross and that shown by another. For example, the Necklace x Barbary hybrid follows the Necklace parent in bill length, but approaches the Barbary parent in body weight; it is intermediate in egg length.

In three cases the mean measure for the F_1 hybrid is above that of both parental species (Barbary x Collared—bill length; Necklace x Barbary—body weight; Necklace x Collared—egg length (possibly)), although in each case the difference is significant between the hybrid and one parent only. Exaggeration of a character in a hybrid beyond the range of both parents is a well known phenomenon and these results do no more than suggest that it occurs in the morphological characters of *Streptopelia* doves studied here.

ACKNOWLEDGEMENTS

I am grateful to Professor W. H. Thorpe for hospitality and facilities at Madingley during this study. The Commonwealth of Australia generously supported me on a C.S.I.R.O. Overseas Studentship during my stay in Cambridge. Mr. N. E. Gilbert and Dr. D. Goodall of the C.S.I.R.O. Division of Mathematical Statistics have been kind enough to read and comment upon the manuscript.

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New information on the Solomon Islands Crowned Pigeon, *Microgoura meeki* Rothschild.

by SHANE PARKER

Received 6th January, 1967

Perhaps the finest ornithological discovery of the naturalist and collector Albert S. Meek (1871-1943) was the striking ground pigeon *Microgoura meeki*; Meek himself held this view.

This aberrant species is still only known from seven skins (five in the American Museum of Natural History, one in the British Museum [Natural History], one untraced) and an egg (in the B.M. [N.H.]), obtained by Meek and his collectors during January 1904 on the island of Choiseul. I intend discussing the location of Meek's three camps on Choiseul in a later paper dealing with his three expeditions to the Solomon Islands; here I am concerned mainly with the information obtained about this pigeon

by members of the Whitney South Sea Expedition in 1927 and 1929, and recorded in the Whitney journals.

Greenway (1958:311-2) regards *Microgoura* as probably extinct, basing this on the opinions of those Whitney collectors who scoured Choiseul for it without success. A less pessimistic conclusion may be drawn from a study of the fieldnotes of Hannibal Hamlin, deposited with the rest of the Whitney fieldnotes in the A.M.N.H.

In 1927, the Whitney Expedition, under Rollo Beck, collected for six days opposite Moli Island towards the north-western end of Choiseul. Hamlin wrote here (21 Nov.): "Mr. Beck has found that the natives savvy [*Microgoura*] but they give the impression that it is rare." Four days were then spent at the southern end of Choiseul Bay, a few miles to the north, but no mention of *Microgoura* occurs in this period. In 1929 Hamlin, with a team of collectors, returned to Choiseul for a more thorough search. No mention of the pigeon occurs in journal entries at northern Choiseul Bay, Ririo [modern Nio] or Senga [opposite Ruiana Island, probably modern Lengatura], two camps on the north-eastern coast, nor from inland areas reached from these camps.

Map of Choiseul, British Solomon Islands, showing localities mentioned in the text (based on Hamlin's sketch map).



At Sasamunga on the southern coast, however, Hamlin wrote (7 Oct.): "Enquiries about the *Microgoura* resulted in some new information: the bird they know here from my description is called "kukuru-ni-lova", lit. "pigeon-belong-ground," and is recalled only by the older men, who say that cats, introduced since the advent of the Mission, have destroyed so many that they cannot remember when one was last seen in the bush. And for the past ten years practically all the bush people have moved down to the salt water. The big river basin [Kolombangara R.] we traversed yesterday is said to have been a good place for them. The birds were easily caught by the boys in their hands after they had found a low-branched

tree in which the pigeons roosted in twos and threes and fours by noting the manure on the ground underneath; they would simply wait their opportunity and seize them while sleeping." This area was searched for several days but no *Microgoura* was seen. Hamlin and his party also called briefly, not collecting, at several south-coast villages to the east of Sasamunga. At Toi Toi [near modern Katurasele] villagers confirmed that they had not seen the pigeon of late, and that cats gone wild had been known to make prey of it. At Sambu [probably modern Zongga] and Rorwai [modern Ruravai] the older inhabitants recognised the description of the bird and remarked on its beauty, imitating its call by a low trilling sound. Three natives of Tauro [modern Taora] on the eastern tip of Choiseul, told Hamlin that they had all seen *Microgoura* that year. Five days' collecting in this locality revealed no trace of the bird. Inhabitants of Kumbura village (now an uninhabited district), on the northern coast of the eastern tip of Choiseul, stated that they too had seen the bird that year. Eighteen days' search there revealed again nothing. At this point Hamlin called off the search.

It is significant that most of the localities at which there was native recognition of *Microgoura* are in the vicinity of riverine flats and swamps (Directorate of Overseas Surveys, 1959). It is highly probable that this pigeon, like its New Guinea relatives in the genus *Goura*, inhabits riverine and flooded forest and other swampy areas. (In this connection, Derek Goodwin has pointed out the analogy between the membranous frontal shield, the modified cere, of *Microgoura*, and the frontal rhamphothecal extensions of *Gallinula*, *Jacana* and other swamp-living genera). There is no mention amongst the Whitney fieldnotes for Choiseul of any collecting having been done in swamps, which may help to explain the expedition's failure to obtain this pigeon.

Mr. John Holsheimer, formerly of the Agricultural Department of the British Solomon Islands Protectorate, made enquiries about *Microgoura* during a visit to the Western District (*i.e.* Choiseul, the Shortlands and the New Georgia group) in 1953. Some natives professed to recognise the bird from his description and said that it was to be found on small islands (I. C. J. Galbraith, pers. comm.). Meek (1913:187) was told by natives that it occurred also on Ysabel and Malaita.

The continuing existence of the Solomon Islands Crowned Pigeon on Choiseul and perhaps other islands must therefore be admitted as a possibility. Its elusiveness may be ascribed, apart from human and feline predation, to a choice of habitat distasteful to collectors. A similar case is that of *Poliolimnas cinereus*, a little rail unrecorded from the Solomons until 1944 (Baker, 1948:9) and since then discovered on other islands in the group, often in some numbers (Galbraith & Galbraith, 1962:22).

It is convenient to point out here that the disposition of the crest of *Microgoura* in life may be different from the position depicted in the colour plate in *Novit. Zool.*, 1904 (pl. 21). The crest feathers of *Goura* arise subcoronally as well as coronally, sweeping up on either side of the head to form a laterally-flattened crest, like the interlacing of the fingers of two hands pressed palm to palm. In all three species the crest feathers begin at a point level with or slightly anterior to the eye. In *Microgoura* they occur much further back on the head, arising, as in *Goura*, from the

sides of the crown as well as from the centre. This crest, has, in the preparation of the skin, been dorsoventrally flattened to lie upon the nape and upper back. It is possible, therefore, that in life the crest of *Microgoura*, though shorter and of a more dorsal position, may be erected in a fashion similar to that of *Goura*. Meek, who saw freshly-dead, if not living examples of the former, remarked upon the similarity between the crests of the two genera (Meek, 1913:129).

ACKNOWLEDGMENTS

I am indebted to Mr. Ian C. J. Galbraith, of the Bird Section, B.M. (N.H.), who, during a visit to the A.M.N.H. laboriously transcribed for me those passages in the Whitney journals relating to the search for *Microgoura*; Dr. Dean Amadon, of the A.M.N.H., who sent me a copy of Hamlin's sketchmap of Choiseul showing the localities visited; and Mr. Derek Goodwin and Mr. Colin Harrison, also of the Bird Section, B.M. (N.H.), for their valuable comments.

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On adherent colours of the plumage

by PETER BERTHOLD

Received 10th January, 1967

Recently, Abdulali (1966) described in this journal the creamy colour of the Pied Imperial Pigeon, *Ducula bicolor*, which apparently is derived from the growing rump feathers.

This coloration is a further example of what I lately (Berthold 1966) termed "Haftfarben", "adherent colours". In this definition, all coloration not produced by pigments within the feather nor by special feather structures, but by substances adhering to the surface of the feather are summarized. To it belongs the "cosmetic coloration", "Schminkfärbung", by coloured oil of the preen gland, pink in the White Pelican, *Pelecanus onocrotalus*, in the Black-headed Gull, *Larus ridibundus* and some other Laridae (Stegmann 1956); yellow in the Great Pied Hornbill, *Buceros bicornis* (Vevers 1964). Further should be mentioned the purple coloration of the lower parts in the Mallard, *Anas platyrhynchos*, in the Teal, *A. crecca* and the Garganey, *A. querquedula*, which is due to a colour of a leaf-louse, described by J. A. Naumann (1818/1844). The discoloration by soot (industrial discoloration, industrial melanism, Hardy 1937, Harrison 1963) observed in many species, is a further example and there is a special case of partial albino House Sparrows, *Passer domesticus*, as a result of discoloration by chemicals (Woodward 1963). Grinnell (1921)